



## MICHIGAN

### \$3,068,358

Funding for AR Activities  
Fiscal Year 2023

AR Lab Network's National Tuberculosis  
Molecular Surveillance Center

### FUNDING TO HEALTH DEPARTMENTS



\$1,884,414

**AR Laboratory Network Regional Lab:** Regional labs boost state and local testing capacity and technology to detect, support response to, and prevent AR threats across the nation—and inform innovations to detect AR.

Since 2018, the National Tuberculosis (TB) Molecular Surveillance Center (NTMSC) has performed whole-genome sequencing on isolates from all U.S. culture-confirmed cases of TB. NTMSC has sequenced more than 42,000 isolates and identified 2,785 patient clusters with genetically similar strains. The data support outbreak investigations and resistance surveillance, including a rifampicin resistance alert that has identified 572 resistant isolates.



\$902,571

**Rapid Detection & Response:** State, territory, and local public health partners fight AR in health care, the community, and food.

CDC-funded HAI/AR Programs form a network of health departments that detect, prevent, respond to, and contain HAI/AR threats and promote appropriate use of antibiotics and antifungals. CDC's AR Lab Network provides nationwide lab capacity to rapidly detect AR and inform local prevention and response activities to stop the spread of antimicrobial-resistant germs and protect people.



\$178,242

**Food Safety** projects protect communities by rapidly identifying antimicrobial-resistant foodborne bacteria to stop and solve outbreaks and improve prevention.

Michigan uses whole genome sequencing to track local outbreaks of *Listeria*, *Salmonella*, *Campylobacter*, *Shigella*, and *Escherichia coli*, identifies AR genes, and shares surveillance data with PulseNet. When outbreaks are detected, local CDC-supported epidemiologists respond to stop their spread.



\$24,714

**Drug-resistant Gonorrhea Detect & Respond Program** works with state and local epidemiology and laboratory partners to test for and quickly respond to resistant gonorrhea to stop its spread in high-risk communities. Only one recommended treatment option remains for gonorrhea and resistance to other antibiotics continues to grow.

The Gonococcal Isolate Surveillance Project (GISP) informs national treatment guidelines for gonorrhea by monitoring how well antibiotics work on laboratory samples collected from sentinel STD clinics, which often are the first to detect the threat. Select STD clinics also enhance surveillance by collecting additional gonococcal isolates from women and from extragenital sites. This work is jointly supported by CDC STI and AR funds.

The AR Investment Map includes data from CDC's largest funding categories for AR. It represents extramural funding that supports AR activities from multiple funding lines in CDC's annual appropriations. Some work received full or partial funding from one-time supplemental appropriations. See the fiscal year 2023 AR Investment Map Supplemental Funding Fact Sheet for more information.

**AR:** antimicrobial resistance  
**COVID-19:** coronavirus disease 2019  
**HAI:** healthcare-associated infection  
**IPC:** infection prevention and control

**NHSN:** National Healthcare Safety Network  
**STD:** sexually transmitted disease  
**STI:** sexually transmitted infection

## FUNDING TO UNIVERSITIES & HEALTHCARE PARTNERS



### University of Michigan: Innovative Prevention & Tracking

A University of Michigan expert works with CDC investigators to provide informatics and information technology expertise to identify, develop, and support automated data collection and reporting in NHSN.

\$49,213



### University of Michigan: Innovative Prevention & Tracking

Experts work with CDC to develop and launch the Hospital Sepsis Program Core Elements, a tool to help healthcare facilities and systems optimize patient care and improve the hospital management and outcomes of sepsis.

\$29,204

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CDC provides critical support in the U.S. and abroad to protect people from antimicrobial resistance.

[ARinvestments.cdc.gov](https://arinvestments.cdc.gov)



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention